

www.elsevier.com/locate/apsusc

Contents

Errata	1
On the topographic and energetic surface modifications induced by laser treatment of metallic substrates before plasma spraying M. Verdier, S. Costil, C. Coddet, R. Oltra and O. Perret	3
NO adsorption on Ge(1 0 0) studied by TPD B.M. Davies and J.H. Craig Jr.	22
Synthesis and characterization of polyurethane/polythiophene conducting copolymer by electrochemical method B. Sari, M. Talu, F. Yildirim and E. Kürşad Balci	27
Annealing amorphous carbon nanotubes for their application in hydrogen storage L. Ci, H. Zhu, B. Wei, C. Xu and D. Wu	39
Surface modification of aluminum by <i>n</i> -pentanephosphonic acid: XPS and electrochemical evaluation L. Forget, F. Wilwers, J. Delhalle and Z. Mekhalif	44
Comparison of properties of CdS thin films grown by two techniques A.I. Oliva, R. Castro-Rodríguez, O. Solís-Canto, V. Sosa, P. Quintana and J.L. Peña	56
Study of the influence of annealing on the properties of CBD-CdS thin films H. El Maliki, J.C. Bernède, S. Marsillac, J. Pinel, X. Castel and J. Pouzet	65
Ablation of carbide materials with femtosecond pulses G. Dumitru, V. Romano, H.P. Weber, M. Sentis and W. Marine	80
Simulations of switching vibrating cantilever in atomic force microscopy M. Balantekin and A. Atalar	86
Strontium hafnate phases by anodic spark conversion J.P. Schreckenbach, N. Meyer, G. Marx, B.T. Lee and W.M. Kriven	97
ELS and XPS study of Pd/PdO methane oxidation catalysts G.B. Hoflund, H.A.E. Hagelin, J.F. Weaver and G.N. Salaita	102
Systematic study of amorphous hydrogenated and fluorinated carbon films A. Lamperti and P.M. Ossi	113
Morphology of enriched alloy layers in an anodized Al-Cu alloy S. Garcia-Vergara, P. Skeldon, G.E. Thompson, P. Bailey, T.C.Q. Noakes, H. Habazaki and K. Shimizu	121
Adhesion and interface chemical reactions of Cu/polyimide and Cu/TiN by XPS WJ. Lee, YS. Lee, SK. Rha, YJ. Lee, KY. Lim, YD. Chung and CN. Whang	128
Characterization of single tracks after laser surface modification of borided 41Cr4 steel A. Pertek and M. Kulka	137
The influence of oxygen in the photoexpansion of GaGeS glasses S.H. Messaddeq, V.R. Mastelaro, M. Siu Li, M. Tabackniks, D. Lezal, A. Ramos and Y. Messaddeq	143
Study on the surface chemical properties of UV excimer laser irradiated polyamide by XPS, ToF-SIMS and	
CFM J. Yip, K. Chan, K.M. Sin and K.S. Lau	151

Interactions of moisture and organic contaminants with SiO ₂ and ZrO ₂ gate dielectric films N. Rana, P. Raghu, E. Shero and F. Shadman	160
C-V characteristics of Pt/PbZr _{0.53} Ti _{0.47} O ₃ /LaAlO ₃ /Si and Pt/PbZr _{0.53} Ti _{0.47} O ₃ /La _{0.85} Sr _{0.15} CoO ₃ /LaAlO ₃ /Si structures for ferroelectric gate FET memory Y.P. Wang, L. Zhou, X.B. Lu and Z.G. Liu	176
Investigation of intermixing induced by sputtering and annealing in multiple quantum well M. Ying, P. Liu, Y. Xia, X. Liu, M. Zhao, S. Xiao, Y. Sun and J. Pan	182
MOCVD deposition of YSZ on stainless steels S. Chevalier, M. Kilo, G. Borchardt and J.P. Larpin	188
Study of Pd-In interaction during Pd deposition on pyrolytically prepared In ₂ O ₃ T. Skála, K. Veltruská, M. Moroseac, I. Matolínová, G. Korotchenkov and V. Matolín	196
Surface characterization and dehydrocyclization activity of Pt/KL catalysts prepared by different methods A. Arcoya, X.L. Seoane and J.M. Grau	206
Physicochemical and morphological properties of hydrated silicas precipitated following alkoxysilane surface modification	
T. Jesionowski, J. Żurawska, A. Krysztafkiewicz, M. Pokora, D. Waszak and W. Tylus	212
Auger electron spectroscopy study of MgB ₂ surface M. Xu, Y. Takano, T. Hatano, T. Kimura and D. Fujita	225
Extracting inter-diffusion parameters of TiC from AES depth profiles H.C. Swart, A.J. Jonker, C.H. Claassens, R. Chen, L.A. Venter, P. Ramoshebe, E. Wurth, J.J. Terblans and W.D. Roos	231
Excimer laser crystallization of amorphous silicon carbide produced by ion implantation A. Hedler, S. Urban, F. Falk, H. Hobert and W. Wesch	240
Oxygen active species in an Ar-O ₂ magnetron discharge for titanium oxide deposition V. Vancoppenolle, PY. Jouan, A. Ricard, M. Wautelet, JP. Dauchot and M. Hecq	249
Influence of surface-capping molecule exchange on the hyper-Rayleigh scattering of CdS nanoparticles Y. Zhang, X. Wang, M. Ma, D. Fu, N. Gu, J. Liu, Z. Lu, Y. Ma, L. Xu and K. Chen	256
Lattice damage induced by Tb-implanted AlN crystalline films F. Lu, H. Hu and A. Rizzi	262
Effect of silicon pre-nitridation on the formation of the interfacial layer during pulsed laser deposition of thin dielectric oxide films	
N. Bassim, V. Craciun, J. Howard and R.K. Singh	267
Effects of substrate temperature on copper(II) phthalocyanine thin films J. E, S. Kim, E. Lim, K. Lee, D. Cha and B. Friedman	274
Vacancy diffusion driven surface rearrangement in the Cu ₃ Au(0 0 1) and Ni ₃ Al(0 0 1) surfaces Ch.E. Lekka and G.A. Evangelakis	280
Improvement in friction by cw Nd:YAG laser surface treatment on cast iron cylinder bore G. Duffet, P. Sallamand and A.B. Vannes	289
Heterogeneity of active carbons in adsorption of phenol aqueous solutions P. Podkościelny, A. Dąbrowski and O.V. Marijuk	297
Observation of the nucleation kinetics of Si quantum dots on SiO ₂ by energy filtered transmission electron microscopy	
G. Nicotra, S. Lombardo, C. Spinella, G. Ammendola, C. Gerardi and C. Demuro	304
Development of an ion-beam sputtering system for depositing thin films and multilayers of alloys and compounds M. Gupta, A. Gupta, D.M. Phase, S.M. Chaudhari and B.A. Dasannacharya	309
Changeable position of SPR peak of Ag nanoparticles embedded in mesoporous SiO ₂ glass by annealing treat- ment	
A Pan 7 Vang H 7hang F Liu V 7hu Y Su and 7 Ding	323

Contents	vi
Growth properties and structural analysis of ZnO films and of Au clusters on ZnO M. Ay, A. Nefedov and H. Zabel	329
Pulsed TEA CO ₂ laser surface modifications of silicon M.S. Trtica and B.M. Gaković	336
Effect of aging on surface chemical bonds of PTFE irradiated by low energy Ti ion J. Zhang, X. Zhang and H. Zhou	343
On the non-linear <i>I-V</i> characteristics of dc magnetron sputtered TiO ₂ thin films M.D. Stamate	353
Author Index	1
Subject Index	v